# IAP7 Rec'd PCT/PTO 24 JAN 2006

PTO-1390 (Rev. 02-2005)
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### TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) **CONCERNING A FILING UNDER 35 U.S.C. 371**

ATTORNEY'S DOCKET NUMBER OGOSH43USA

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

INTERNATIONAL APPLICATION NO.

TITLE OF INVENTION

INTERNATIONAL FILING DATE

PCT/JP2004/005389

15 April 2004

25 July 2003

HIGHLY PURE HAFNIUM MATERIAL, TARGET AND THIN FILM COMPRISING THE

SAME AND METHOD FOR PRODUCING HIGHLY PURE HAFNIUM									
ΑP	APPLICANT(S) FOR DO/EO/US								
	Yuichiro Shindo								
App	olicant	herewith	submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:						
1.	$\boxtimes$	This is a	FIRST submission of items concerning a filing under 35 U.S.C. 371.						
2.		This is a	SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371.						
3.	×	This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5 (6), (9) and (21) indicated below.							
4.	$\boxtimes$	The US has been elected (Article 31)							
5.	$\boxtimes$	A copy of the International Application as filed (35 U.S.C. 371 (c)(2))							
		a. 🛛	is attached hereto (required only if not communicated by the International Bureau).						
		b. 🗆	has been communicated by the International Bureau.						
		c. 🗆	is not required, as the application was filed in the United States Receiving Office (RO/US).						
6.	$\boxtimes$	An Englis	h language translation of the International Application as filed (35 U.S.C. 371(c)(2)).						
	-	a. 🛛	is attached hereto.						
		b. 🗆	has been previously submitted under 35 U.S.C. 154(d)(4).						
7.		Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)).							
		a. 🗆	are attached hereto (required only if not communication by the International Bureau).						
		b. 🗆	have been communicated by the International Bureau.						
		c. 🗆	have not been made; however, the time limit for making such amendments has NOT expired.						
		d. 🗆	have not been made and will not be made.						
8.		An Englis	h language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).						
9.	$\boxtimes$	An oath o	r declaration of the inventor(s) (35 U.S.C. 371(c)(4)).						
10.									
	Items	11 to 20	below concern document(s) or information included:						
11.		An Inform	nation Disclosure Statement under 37 CFR 1.97 and 1.98.						
12.		An assign	nment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.						
13.	$\boxtimes$	First and	Second Preliminary Amendments.						
14.	$\boxtimes$	An Application Data Sheet under 37 CFR 1.76.							
15.	<b>-</b>	A substitute specification.							
16.	$\boxtimes$	A power of	of attorney and/or change of address letter. –(combined with Declaration, see above)						
17.		A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821-1.825							
18.		A second copy of the published International Application under 35 U.S.C. 154(d)(4).							
19.		A second	copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).						
20.	⊠	Other iter	ns or information: Verification of Translation; International Search Report; Request; Demand; Applicant's Response to the PCT Written Opinion; International Preliminary Examination Report						

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed from to the USPTO. Time will vary depending upon the individual case. Any:comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should to sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

## IAP6 Rec'd PCT/PTO 24 JAN 2006

PTO-1390 (Rev. 02-2005)
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U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE
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The following flees have been submitted  21. Bill Basic national fee	U.S. APPLICATIO	NO (If known se	767 <sup>1.1</sup>		104/005389	OGOSH			
22. Basic national tea	The following fees have been submitted				Calculations	Office use only			
If International preliminary examination report prepared by USPTO and all claims salisty provisions of PCT Article 33(1)(4)	21. 🖾 Basic n	ational fee	\$300.00						
Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Search Report prepared and provided to the Office	If International pre provisions of	eliminary examinatio PCT Article 33(1)-(4	\$100	\$ 200.00					
Additional tee for specification and drawings filed in paper over 100 sheets (excluding sequence island or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or faction thereof.  Total Sheets	23. Search Search fee (37 Cl an Internatio International Sear	fee FR 1.445(a)(2)) has nal Searching Authorch Report prepared	\$ 400.00						
Additional tee for specification and drawings filed in paper over 100 sheets (excluding sequence island or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or faction thereof.  Total Sheets	- то	TAL OF 21, 22 and	23 =			\$ 900.00			
fraction thereof (round up to a whole number)   x \$250	Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is								
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).  CLAIMS    NUMBER FLED   NUMBER FLATA   RATE   \$   Total claims   20 - 20 = 0   x \$500   \$   Independent Claims   20 - 30 = 0   x \$500   \$   Independent Claims   2 - 3 = 0   x \$500   \$   MULTIPLE DEPENDENT CLAIM(S) (if applicable)   + \$3560   \$   SUBTOTAL   Solution   5   \$0.00      Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by by %.  Processing fee of \$130.00 for furnishing the English translation later than 30 months from the sarilest claimed priority date (37 CFR 1.492(f)).  Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$44.00 per property.    TOTAL FLEE SENCLOSED   \$900.00     Amount to be refunded: Amount to be charged   \$900.00     Amount to be charged   \$900.00   \$900.00     Please charge my Deposit Account No. 08-3040 in the amount of \$ \$ 900.00     Please charge my Deposit Account No. 08-3040 in the amount of \$ \$ 900.00     C. Ø The Commissioner is hereby suthorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 08-3040. A duplicate copy of this sheet is enclosed.   Please charge my Deposit Account No. 08-3040. A fullicate copy of this sheet is enclosed.   Please charge my Deposit Account No. 08-3040. A fullicate copy of this sheet is enclosed.   Fees are to be charged to a credit card. WARNING: Information and authorization on PTO-2038.   NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.   SEND ALL CORRESPONDENCE TO:	Total Sheets	Extra Sheets	fraction	thereof (round up to a	RATE				
from the earliest claimed priority date (37 CFR 1.492(e)).  CLAIMS   NUMBER FILED   NUMBER EXTRA   RATE   \$ Total claims   20 - 20 = 0	10 - 100	/50=			× \$250		<del>-</del>		
CLAIMS   NUMBER FILED   NUMBER EXTRA   RATE   \$	Surcharge of \$13	0.00 for furnishing th	ne oath or de	claration later than 30 mor	iths	\$			
Total claims  20 - 20 = 0					RATE	\$			
MULTIPLE DEPENDENT CLAIM(S) (if applicable)  TOTAL OF ABOVE CALCULATIONS = \$ 0.00    Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 7.  SUBTOTAL = \$ 900.00    Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).  TOTAL NATIONAL FEE = \$ 900.00    Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$44.00 per property.    TOTAL FEES ENCLOSED   \$ 900.00    Amount to be refunded:   \$ 900.00   \$				NOMBER EXTINC					
TOTAL OF ABOVE CALCULATIONS = \$ 0.00  Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by ½.  SUBTOTAL = \$ 900.00  Processing fee of \$130.00 for furnishing the English translation later than 30 months from the satiest claimed priority date (37 CFR 1.492(f)).  TOTAL NATIONAL FEE = \$ 900.00  Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31), \$40.00 per property. + TOTAL FEES ENCLOSED  \$ 900.00  Amount to be refunded: Amount to be charged  \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Independent Clair	ms 2 -	3 = 0		x \$200	\$			
Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by ½.  SUBTOTAL = \$900.00  Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).  TOTAL NATIONAL FEE = \$900.00  Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property.  TOTAL FEES ENCLOSED  Amount to be refunded: Amount to be charged  Amount to be charged  Amount to be refunded: Amount to be charged  A check in the amount of \$ 900.00	MULTIPLE DEPE	NDENT CLAIM(S) (	if applicable)	)	+ \$360	\$			
by ½.  SUBTOTAL = \$ 900.00  Processing fee of \$130.00 for furnishing the English translation later than 30 months from the searliest claimed priority date (37 CFR 1.492(f)).  TOTAL NATIONAL FEE = \$ 900.00  Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property.				TOTAL OF ABOVE O	ALCULATIONS =	\$ 0.00			
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).  TOTAL NATIONAL FEE = \$900.00  Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property. + TOTAL FEES ENCLOSED  TOTAL FEES ENCLOSED  Amount to be refunded: Amount to be charged  a. A check in the amount of \$900.00 to cover the above fees is enclosed.  b. Please charge my Deposit Account No. 08-3040 in the amount of \$10 cover the above fees. A duplicate copy of this sheet is enclosed.  c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 08-3040. A duplicate copy of this sheet is enclosed.  d. Fees are to be charged to a credit card. WARNING: Information on this form may be become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.  NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.  SEND ALL CORRESPONDENCE TO:  Customer No.: 00270  HOWSON AND HOWSON  Spring House Corporate Center  321 Norristown Road, Ste. 200  P.O. Box 457  Spring House, PA 19477  37,277		ns small entity statu	s. See 37 CF	FR 1.27. The fees indicate	d above are reduced	\$			
earliest claimed priority date (37 CFR 1.492(f)).  TOTAL NATIONAL FEE = \$900.00  Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property. + TOTAL FEES ENCLOSED  **TOTAL FEES ENCLOSED**  **Amount to be refunded: Amount to be charged**  **A check in the amount of \$900.00						•			
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property. +  TOTAL FEES ENCLOSED  Amount to be refunded: \$900.00  Amount to be charged  Amount to be refunded: \$900.00  Decrease charge my Deposit Account No. 08-3040 in the amount of \$10 cover the above fees is enclosed.  Please charge my Deposit Account No. 08-3040 in the amount of \$10 cover the above fees.  A duplicate copy of this sheet is enclosed.  The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 08-3040. A duplicate copy of this sheet is enclosed.  The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 08-3040. A duplicate copy of this sheet is enclosed.  WARNING: Information on this form may be become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.  NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filled and granted to restore the application to pending status.  SEND ALL CORRESPONDENCE TO:  Customer No.: 00270  SIGNATURE  William Bak  NAME  NAME  PLO Box 457  Spring House, PA 19477  37,277				_		,			
accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property. + TOTAL FEES ENCLOSED    Amount to be refunded: Amount to be charged   \$ 900.00	Faa faa saaadina	the englaced engine							
Amount to be refunded: Amount to be refunded: Amount to be charged  a. A check in the amount of \$ 900.00 to cover the above fees is enclosed.  b. Please charge my Deposit Account No. 08-3040 in the amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed.  c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 08-3040. A duplicate copy of this sheet is enclosed.  d. Fees are to be charged to a credit card. WARNING: Information on this form may be become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.  NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.  SEND ALL CORRESPONDENCE TO:  Customer No.: 00270  HOWSON AND HOWSON  Spring House Corporate Center 321 Norristown Road, Ste. 200  P.O. Box 457  Spring House, PA 19477  37,277	accompanied by	an appropriate cove	r sheet (37 CF	FR 3.28, 3.31). <b>\$40.00</b> pe	r property. +				
Amount to be charged  a. A check in the amount of \$ 900.00 to cover the above fees is enclosed.  b. Please charge my Deposit Account No. 08-3040 in the amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed.  c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 08-3040. A duplicate copy of this sheet is enclosed.  d. Fees are to be charged to a credit card. WARNING: Information on this form may be become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.  NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.  SEND ALL CORRESPONDENCE TO:  Customer No.: 00270  HOWSON AND HOWSON  Spring House Corporate Center 321 Norristown Road, Ste. 200  P.O. Box 457  Spring House, PA 19477  37,277	=			TOTAL	EES ENCLOSED	\$ 900.00			
b. Please charge my Deposit Account No. 08-3040 in the amount of \$									
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Deposit Account No. <u>08-3040</u> . A duplicate copy of this sheet is enclosed.  d. Fees are to be charged to a credit card. WARNING: Information on this form may be become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.  NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.  SEND ALL CORRESPONDENCE TO:  Customer No.: 00270  HOWSON AND HOWSON  Spring House Corporate Center 321 Norristown Road, Ste. 200 P.O. Box 457  Spring House, PA 19477  37,277					to cover the a	bove fees.			
should not be included on this form. Provide credit card information and authorization on PTO-2038.  NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.  SEND ALL CORRESPONDENCE TO:  Customer No.: 00270  HOWSON AND HOWSON  Spring House Corporate Center 321 Norristown Road, Ste. 200 P.O. Box 457  Spring House, PA 19477  37,277						ired, or credit any ov	verpayment to		
must be filed and granted to restore the application to pending status.  SEND ALL CORRESPONDENCE TO:  Customer No.: 00270  HOWSON AND HOWSON  Spring House Corporate Center 321 Norristown Road, Ste. 200 P.O. Box 457  Spring House, PA 19477  37,277		d. $\Box$ Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may be become public. <b>Credit card information</b>							
Customer No.: 00270  HOWSON AND HOWSON  Spring House Corporate Center 321 Norristown Road, Ste. 200 P.O. Box 457  Spring House, PA 19477  Signature  William Bak NAME  37,277	NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b))								
HOWSON AND HOWSON Spring House Corporate Center 321 Norristown Road, Ste. 200 P.O. Box 457 Spring House, PA 19477  William Bak NAME 37,277	SEND ALL CORF	SEND ALL CORRESPONDENCE TO:							
Spring House Corporate Center  321 Norristown Road, Ste. 200 P.O. Box 457  Spring House, PA 19477  37,277	Customer No.: 00270 SIGNATURE								
321 Norristown Road, Ste. 200 P.O. Box 457 Spring House, PA 19477 37,277	HOWSON AND HOWSON								
321 Norristown Road, Ste. 200 P.O. Box 457 Spring House, PA 19477 37,277	Spring House Corporate Center William Bak								
Spring House, PA 19477	321 Norristown Road, Ste. 200 NAME								

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re t	he Application of:	)	
		)	Examiner:
Yuich	iro Shindo	)	
		)	Group Art Unit:
Applic	cation No.:	)	
		)	
Corres	sponding International Filing No.:	)	
	PCT/JP2004/005389	)	
		)	
Filed:	Herewith	)	
		)	
For:	HIGHLY PURE HAFNIUM	)	
	MATERIAL, TARGET AND	)	
	THIN FILM COMPRISING THE	)	
	SAME AND METHOD FOR	)	
-	PRODUCING HIGHLY PURE	)	
	HAFNIUM	)	
		-	

Mail Stop PCT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### **VERIFICATION OF TRANSLATION**

Sir:

- I, Isamu Ogoshi, having been warned that willful false statements and the like are punishable by fine or imprisonment or both, under section 1001 of Title 18 of the United States Code, and may jeopardize the validity of the above-captioned application and any patent issuing thereon, declare:
- (1) I am a patent attorney authorized to practice law in Japan and am engaged in the practice of law with OGOSHI International Patent Office at Toranomon 9 Mori Bldg. 3F, 2-2, Atago 1-Chome, Minato-ku, Tokyo 105-0002, Japan.

- (2) I am fluent in the Japanese and English Languages.
- (3) I have reviewed the attached translation, and certify that it is an accurate English translation of the Japanese language international application of Yuichiro Shindo filed on April 15, 2004 and given International Application No. PCT/JP2004/005389.
- (4) All of the statements made herein of my own knowledge are true and all statements made herein on information and belief are believed to be true.

iany 20, 200

Date

Isamu Ogoshi